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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/863,103 05/23/97 BRYANT

C E025-1030 *WC*

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QM02/1012

EXAMINER

KOCZO JR, M

ART UNIT

PAPER NUMBER

3748

DATE MAILED: 10/12/00 *14*

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/863,103

Applicant(s)
Bryant

Examiner
Michael Koczo, Jr.

Group Art Unit
3748



☒ Responsive to communication(s) filed on Aug 9, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire THREE month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 25, 27, 32-42, and 44-53 is/are pending in the application.

Of the above, claim(s) 27, 32, 33, 37, 40-42, 45, 48, 50, and 51 is/are withdrawn from consideration.

☒ Claim(s) 39 and 47 is/are allowed.

☒ Claim(s) 25, 34, 36, 38, 44, 46, 52, and 53 is/are rejected.

☒ Claim(s) 35 and 49 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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Applicant's arguments filed on August 9, 2000 have been fully considered but they are not persuasive.

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Claims ^{38,}~~46~~ and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by Bricout.

Bricout discloses an atmospheric air intake valve 1 and a compressed air intake valve 6. Figure 2 shows that the compressed air valve 6 stays open (line 23) past BDC (line y-y) to point E which is during the compression stroke.

Claims 25, 34, 36, 44 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bricout in view of Miller '934. Bricout discloses the invention substantially as claimed. However, Bricout does not disclose an intercooler for reducing the charge air temperature. Miller '934 discloses an intercooler 36 for cooling the charge air in order to increase its density. In view of this teaching, it would have been obvious to provide the engine of Bricout with an intercooler. Miller '934 also teaches control of the valve timing to optimize engine operation under varying conditions.

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Claims 35 and ⁴⁹~~48~~ are objected to as being dependent on a rejected claim. These claims will be allowed if made self-contained.

Claims 39 and 47 are allowed.

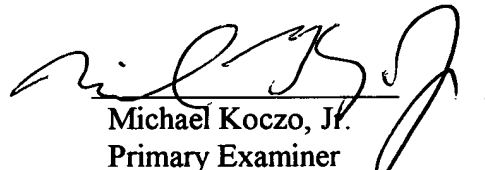
Applicant argues that "Miller and Bricout do not teach cylinders with two inlet ports, nor do they teach any introduction of air to the cylinder during the compression stroke."

Bricout shows two inlet ports with valves 1 and 6. Air is introduced during the compression stroke as explained supra.

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Miller '934 shows an air inlet port with valve 42 and a fuel gas inlet port with valve 46. Attention is directed to column 2, lines 31 to 35 which state that "Or, the time of closing might be delayed passed bottom dead center with closing occurring 60 or 70 degrees before top dead center in which case the effective compression ratio would be reduced, say for example 6 to 1." That is, the inlet valve is open during the compression stroke.

Claims 27, 32, 33, 37, 40 to 42, 45, 48, 50 and 51 stand withdrawn from consideration as being drawn to a non-elected species.



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